

Applications

PROCESS WEIGHING

- *Batching/Blending*
- *Filling/Dispensing*
- *Level-by-Weight*
- *Check Weighing*



Features

WAVERSAVER®

- *Ignores vibration on and around scales*

C2® Electronic Calibration

- *Electronic calibration without test weights*



INTEGRATED TECHNICIAN®

- *Weighing system monitoring and troubleshooting*

THE BUTTON

- *One step calibration with C2 load cells*

The HI 1746-WS Weigh Scale Module is specifically designed to work with an Allen-Bradley® SLC™ 500 Series processor. This weighing instrument installs like an I/O module in either a local or remote rack.

The HI 1746-WS Weigh Scale Module reads net, gross and rate-of-change data from Hardy load points (or industry standard load cells) and sends this data to the SLC 500 processor. It also compares weight to set-point values (with pre-act values) and transfers the results to the SLC's input image table for quick response. Two relay output drive signals can be used for control directly from the module. Three LED status lights report functional characteristics.

FEATURES

The HI 1746-WS provides 5V excitation voltage for up to four 360-Ohm load sensors associated with a single vessel and will support up to eight load sensors with external power. Two setpoints can be established in the module with corresponding pre-act and deadband values, and two relay drive outputs are provided. The setpoint comparison status can be read in the input image table for quick response in addition to the relay drive signals. The module provides accurate weight readings with 20-bit A/D conversion, providing 985,000 counts of displayed resolution over the 0-15mV range. You set the gross or net weight to zero at any point in the process. The module returns "weight-in-motion" and other status information.

C2® ELECTRONIC CALIBRATION

C2 enables electronic calibration of the weigh system without test weights. This saves system start-up costs and aggravation. Of course, even if C2 certified load sensors are not used, the system can still be calibrated the slow, traditional way using certified test weights.

WAVERSAVER®

WAVERSAVER eliminates the effects of unwanted plant vibration on or around the scale by permitting the weigh module to "see" through the unwanted vibration signals - as low as 0.25Hz - while yielding a stable actual reading.

INTEGRATED TECHNICIAN®

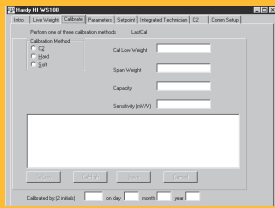
INTEGRATED TECHNICIAN, used in conjunction with an IT Junction Box, provides built-in system diagnostics that enable you to troubleshoot and diagnose your weighing system. You can read individual load sensor voltages and weights, make comparisons, and isolate individual system components for quick and easy troubleshooting.

THE BUTTON®

With one push of a button the weigh scale module automatically calibrates the weighing system, making it ready for use. This saves system start-up time costs and aggravations.

ACCESSORIES

HI WS100 Configuration Software



The fastest and easiest way to configure the HI 1746-WS weigh scale module is with the HI WS100 Configuration Software. No need to write ladder logic, this optional software unleashes the full power of your HI 1746-WS as it provides configuration, troubleshooting, calibration, and real-time data displays.

COMPONENTS TO COMPLETE YOUR HARDY SYSTEM

Hardy Bench Scales, Floor Scales and Load Points



ADVANTAGE® Series Load Point with C2 Calibration



ANY-WEIGH® Scales

Hardy C2 Certified Cable Hardy Junction Box (HI 215IT Series) with INTEGRATED TECHNICIAN



HARDY
PROCESS SOLUTIONS
Measurement • Automation • Productivity

SPECIFICATIONS

Power

- Provided from the SLC 500 rack: +5Vdc
- 1,000 dc minimum isolation from backplane logic circuitry

Backplane Current

- < 0.2 Amps with four 350 ohm or 1,000 ohm load sensors

Inputs

- Signal: -0.5mV through +16.5 mV
- Sense: $\pm 5Vdc \pm 5\%$
- C2 Second Generation Calibration data
- INTEGRATED TECHNICIAN (IT), mv, mV/V weight, resistance in ohms, excitation current

Outputs

- Excitation 5Vdc $\pm 5\%$ 1.15w max
- INTEGRATED TECHNICIAN (IT) reference control

Common Mode Rejection

- 100dB at or below 60 Hz

Resolution

- 20-bit A/D resolution (985,000 counts of displayed resolution over -0.5 to +16mV range)

Conversion Rate

- 20 updates per second

Setpoints Output

- Two independent TTL level drive signals

Location

- Single slot (local or remote rack)
- SLC 502, 503, 504, 505

Vibration Frequency Rejection

- 0.25 Hz and above in 5 selectable steps
- WAVERSAVER

Weight

- 1.1 lb (0.5 kg)

Weighing Modes

- Net, Gross, Rate-of-Change (ROC)

Calibration

- Electronic (C2)
- Traditional (test weights)

Certifications

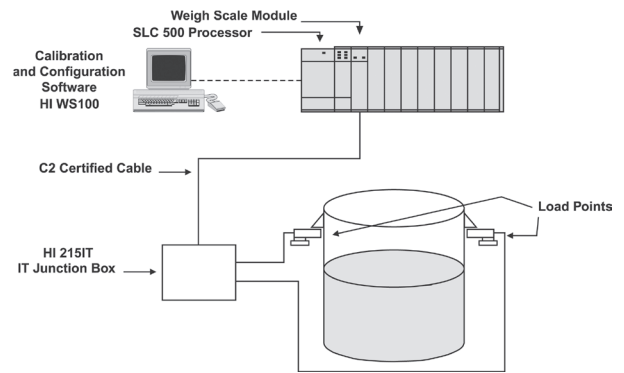
- CE, UL, CUL

Warranty

- Two-year warranty against defects in workmanship

All specifications subject to change without notice. Please contact the Hardy factory or visit our website for the latest specifications.

TYPICAL CONFIGURATION



OPTIONS

Remote Termination Assembly (-RTA)

The weigh scale module optional Remote Termination Assembly provides connection points between the cable assembly to the module and individual wires from the junction box, or load sensors, of up to two scales. The RTA is designed for standard DIN mounting rails or standoffs. With an HI 1746-RTA configuration, the weigh scale modules can be replaced without disturbing the wiring.

Cable (-C6)

Hardy provides an optional 6-foot (1.8m) cable assembly from the weigh scale module to the remote termination assembly for both single and dual configuration.

Options Ordering

Options can be ordered at the same time the module is ordered by adding the dash designators to the end of the module number.

For example:

HI 1746-WS-RTA-C6	Single weigh scale module with remote termination assembly and cable
HI 1746-WS	Single weigh scale module alone
HI 1746-XX-RTA	Remote termination panel alone; supports two single-scale and one dual-scale module
HI 1746-XX-C6	Single-scale 6-foot (1.8m) cable from RTA to a single module

To learn more about the HI 1746-WS visit our web site for:

- full product specifications
- ordering information
- application notes
- technical description
- operator's manual

www.hardysolutions.com

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